AMENDMENTS

In the Claims

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended): A liquid crystal display device, comprising:

a first substrate and a second substrate opposing to each other;

a liquid crystal layer formed between the first substrate and the second substrate;

a plurality of scanning bus lines and a plurality of data bus lines arranged in a matrix form to define a plurality of pixel areas on the second substrate;

a plurality of TFT devices formed in the pixel areas ~~the plurality of pixels,~~ respectively; and

a first pixel electrode and a second pixel electrode formed in the pixel areas respectively ;~~a plurality of pixel electrode layers formed in the plurality of pixels, respectively;~~

wherein one of the data bus lines is disposed between the first pixel electrode and the second pixel electrode, and ~~wherein, in each pixel area, the pixel electrode layer is formed between a first data bus line and a second data bus line; and~~

wherein~~, in each pixel area,~~ a first space between the ~~first~~ data bus line and ~~a periphery of~~ the first pixel electrode is a liquid crystal reverse region, and a second space between the ~~second~~ data bus line and ~~a periphery of~~ the second pixel electrode

is a liquid crystal non-reverse region, and the first space is larger than the second space.

2. (currently amended): The liquid crystal display device as claimed in claim 1, further comprising:

an alignment film having ~~of~~ a rubbing direction in the pixel areas respectively; ~~in the plurality of pixels, respectively;~~

wherein an included angle between the rubbing direction and the data bus line is 40~50 degrees.

3. (currently amended): The liquid crystal display as claimed in claim 1 ~~2~~, wherein the first space is 4~5μm and the second space is 2~3μm.

4. (currently amended): The liquid crystal display device as claimed in claim 1, further comprising:

an opaque layer overlapping the data bus line, ~~the first data bus line, the second data bus line,~~ the first space and the second space; and

a first light-shielding layer formed adjacent to the first pixel electrode, and a second light-shielding layer formed adjacent to the second pixel electrode;

~~a plurality of light-shielding layers formed in the plurality of pixel areas, respectively;~~

~~wherein, in each pixel area, a first light-shielding layer is formed between the first data bus line and the periphery of the pixel electrode layer; and~~

~~wherein, in each pixel area, a second light-shielding layer is formed between the second data bus line and the periphery of the pixel electrode layer; and~~

wherein a first overlapping width is defined by ~~between~~ the opaque layer and the first light-shielding layer, and a second overlapping width is defined by ~~between~~ the opaque layer and the second light-shielding layer.

5. (original): The liquid crystal display as claimed in claim 4, wherein the first overlapping width is equal to the second overlapping width.

6. (original): The liquid crystal display as claimed in claim 4, wherein the first overlapping width is different from the second overlapping width.

7. (currently amended): The liquid crystal display device as claimed in claim 6, ~~further comprising:~~ wherein the first overlapping width is larger than the second overlapping width.

~~an alignment film of a rubbing direction formed in the plurality of pixels, respectively;~~

~~wherein, when an included angle between the rubbing direction and the data bus line is 40~50 degrees, the first space between the first data bus line and the periphery of the pixel electrode layer is a liquid crystal reverse region, and the second space between the second data bus line and the periphery of the pixel electrode is a liquid crystal non-reverse region; and~~

~~wherein, the first overlapping width adjacent to the liquid crystal reverse region is larger than the second overlapping width adjacent to the liquid crystal non-reverse region.~~

8. (original): The liquid crystal display as claimed in claim 7, wherein the first overlapping width is 6.5~7.5μm and the second overlapping width is 4.5~5.5μm.

9. (currently amended): The liquid crystal display device as claimed in claim 4, wherein the second substrate further comprises:

a gate insulating layer formed overlying the second substrate and covering the scanning bus lines and the light-shielding layers, ~~in which~~ the data bus lines formed overlying the gate insulating layer; and

a passivation layer formed overlying the gate insulating layer and covering the data bus lines, ~~in which~~ the first electrode and the second pixel electrode formed overlying the passivation layer.

10. (currently amended): The liquid crystal display as claimed in claim 1, wherein the first substrate further comprises a color filter layer and a common electrode ~~layer~~.

11. (currently amended): A liquid crystal display device, comprising:

a first substrate and a second substrate opposing to each other;

a liquid crystal layer formed between the first substrate and the second substrate;

a plurality of scanning bus lines and a plurality of data bus lines arranged in a matrix form to define a plurality of pixel areas on the second substrate;

a plurality of TFT devices formed in the pixel areas ~~the plurality of pixels,~~ respectively;

a first pixel electrode and a second pixel electrode formed in the pixel areas respectively; and ~~a plurality of pixel electrode layers formed in the plurality of pixels, respectively;~~

~~a plurality of light-shielding layers formed in the plurality of pixel areas overlying the second substrate, respectively; and~~

an opaque layer formed overlying the first substrate;

wherein one of the data bus lines is disposed between the first pixel electrode and the second pixel electrode; and ~~wherein, in each pixel area, the pixel electrode layer is formed between a first data bus line and a second data bus line, in which~~ a first space ~~distance~~ is kept between the ~~first~~ data bus line and ~~the periphery of~~ the first pixel electrode, and a second space is kept between the ~~second~~ data bus line and ~~the periphery of~~ the second pixel electrode;

wherein a first light-shielding layer is formed adjacent to the first pixel electrode and a second light-shielding layer is formed adjacent to the second pixel electrode;

~~wherein, in each pixel area, a first light-shielding layer is formed between the first data bus line and the periphery of the pixel electrode layer, and a second light-shielding layer is formed between the second data bus line and the periphery of the pixel electrode layer;~~

wherein the opaque layer overlaps the ~~first~~ data bus line, ~~the second data bus line,~~ the first space and the second space;

wherein~~, in each pixel area,~~ a first overlapping width defined by ~~between~~ the opaque layer and the first light-shielding layer is different from a second overlapping width defined by ~~between~~ the opaque layer and the second light-shielding layer.

12. (currently amended): The liquid crystal display device as claimed in claim 11, further comprising:

an alignment film having ~~of~~ a rubbing direction formed in the pixel areas ~~the plurality of pixels,~~ respectively;

wherein~~, when~~ an included angle between the rubbing direction and the data bus line is 40~50 degrees, the first space between the ~~first~~ data bus line and ~~the periphery of~~ the first pixel electrode is a liquid crystal reverse region, and the second space between the ~~second~~ data bus line and ~~the periphery of~~ the second pixel electrode is a liquid crystal non-reverse region; and

wherein the first overlapping width ~~adjacent to the liquid crystal reverse region~~ is larger than the second overlapping width ~~adjacent to the liquid crystal non-reverse region~~.

13. (currently amended): The liquid crystal display as claimed in claim 11 ~~12~~, wherein the first overlapping width is 6.5~7.5μm and the second overlapping width is 4.5~5.5μm.

14. (original): The liquid crystal display as claimed in claim 11, wherein the first space is equal to the second space.

15. (original): The liquid crystal display as claimed in claim 11, wherein the first space is different from the second space.

16. (currently amended): The liquid crystal display device as claimed in claim 15~~,~~ ~~further comprising:~~ wherein the first space is larger than the second space.

~~an alignment film of a rubbing direction formed in the plurality of pixels, respectively;~~

~~wherein, when an included angle between the rubbing direction and the data bus line is 40~50 degrees, the first space between the first data bus line and the periphery of the pixel electrode layer is a liquid crystal reverse region, and the second space between the second data bus line and the periphery of the pixel electrode is a liquid crystal non-reverse region; and~~

~~wherein, the first space adjacent to the liquid crystal reverse region is larger than the second space adjacent to the liquid crystal non-reverse region.~~

17. (currently amended): The liquid crystal display as claimed in claim 16, wherein the first space ~~overlapping width~~ is 4~5μm and the second space ~~overlapping width~~ is 2~3μm.

18. (currently amended): The liquid crystal display device as claimed in claim 11, wherein the second substrate further comprises:

a gate insulating layer formed overlying the second substrate and covering the scanning bus lines and the light-shielding layers, ~~in which~~ the data bus lines ~~are~~ formed overlying the gate insulating layer; and

a passivation layer formed overlying the gate insulating layer and covering the data bus lines, ~~in which~~ the first pixel electrode and the second pixel electrode formed overlying the passivation layer.

19. (currently amended): The liquid crystal display as claimed in claim 11, wherein the first substrate further comprises a color filter layer and a common electrode ~~layer~~.

20. (currently amended): A fabrication method for a liquid crystal display device, comprising steps of:

providing a first substrate;

forming a plurality of scanning bus lines and a plurality of light-shielding layers overlying the first substrate;

forming a gate insulating layer overlying the first substrate to cover the scanning bus lines and the light-shielding layers;

forming a plurality of data bus lines overlying the gate insulating layer, wherein ~~in which~~ the data bus lines and the scanning bus lines are arranged in a matrix form to define a plurality of pixel areas;

forming a plurality of TFT devices in the pixel areas ~~the plurality of pixels,~~ respectively; and

forming a first pixel electrode and a second pixel electrode overlying the passivation layer in the pixel areas respectively; ~~forming a plurality of pixel electrode layers overlying the passivation layer in the plurality of pixels, respectively~~

wherein one of the data bus lines is disposed between the first pixel electrode and the second pixel electrode, and ~~wherein, in each pixel area, the pixel electrode layer is formed between a first data bus line and a second data bus line; and wherein, in each pixel area,~~ a first space between the ~~first~~ data bus line and ~~a periphery of~~ the first pixel electrode is a liquid crystal reverse region, and a second space between the ~~second~~ data bus line and ~~a periphery of~~ the second pixel electrode is a liquid crystal non-reverse region; and

wherein the first space is larger than the second space.

21. (currently amended): The fabrication method for a liquid crystal display device as claimed in claim 20, further comprising a step of:

forming an alignment film having ~~of~~ a rubbing direction overlying the first pixel electrode, the second pixel electrode, and the passivation layer;

wherein an included angle between the rubbing direction and the data bus line is 40~50 degrees.

22. (currently amended): The fabrication method for a liquid crystal display device as claimed in claim 20 ~~21~~, wherein the first space is 4~5μm and the second space is 2~3μm.

23. (currently amended): The fabrication method for a liquid crystal display device as claimed in claim 20, further comprising steps:

providing a second substrate opposing to the first substrate; and

forming an opaque layer overlying the second substrate, wherein ~~in which~~ the opaque layer overlaps the data bus line ~~the first data bus line, the second data bus line,~~ the first space and the second space;

wherein the first light-shielding layer is formed adjacent to the first pixel electrode;

wherein the second light-shielding layer is formed adjacent to the second pixel electrode; and

~~wherein, in each pixel area, the first light-shielding layer is formed between the first data bus line and the periphery of the pixel electrode layer;~~

~~wherein, in each pixel area, the second light-shielding layer is formed between the second data bus line and the periphery of the pixel electrode layer; and~~

wherein a first overlapping width is defined by ~~between~~ the opaque layer and the first light-shielding layer, and a second overlapping width is defined by ~~between~~ the opaque layer and the second light-shielding layer.

24. (original): The fabrication method for a liquid crystal display as claimed in claim 23, wherein the first overlapping width is equal to the second overlapping width.

25. (original): The fabrication method for a liquid crystal display as claimed in claim 23, wherein the first overlapping width is different from the second overlapping width.

26. (currently amended): The fabrication method for a liquid crystal display as claimed in claim 25, wherein the first overlapping width is larger than the second overlapping width. ~~further comprising a step of:~~

~~forming an alignment film of a rubbing direction overlying the pixel electrode layer and the passivation layer;~~

~~wherein, when an included angle between the rubbing direction and the data bus line is 40~50 degrees, the first space between the first data bus line and the periphery of the pixel electrode layer is a liquid crystal reverse region, and the second space between the second data bus line and the periphery of the pixel electrode is a liquid crystal non-reverse region; and~~

~~wherein, the first overlapping width adjacent to the liquid crystal reverse region is larger than the second overlapping width adjacent to the liquid crystal non-reverse region.~~

27. (original): The fabrication method for a liquid crystal display as claimed in claim 26, wherein the first overlapping width is 6.5~7.5μm and the second overlapping width is 4.5~5.5μm.

28. (currently amended): The fabrication method for a liquid crystal display as claimed in claim 23, further comprising steps of:

forming a color filter layer overlying the second substrate;

forming a common electrode ~~layer~~ overlying the color filter layer and the opaque layer; and

forming an alignment layer overlying the common electrode ~~layer~~.

29. (original): The fabrication method for a liquid crystal display as claimed in claim 23, further comprising a step of forming a liquid crystal layer between the first substrate and the second substrate.

30. (currently amended): A fabrication method for a liquid crystal display device, comprising steps of:

providing a first substrate;

forming a plurality of scanning bus lines and a plurality of light-shielding layers overlying the first substrate;

forming a gate insulating layer overlying the first substrate to cover the scanning bus lines and the light-shielding layers;

forming a plurality of data bus lines overlying the gate insulating layer, wherein ~~in which~~ the data bus lines and the scanning bus lines are arranged in a matrix form to define a plurality of pixel areas;

forming a plurality of TFT devices in the pixel areas ~~the plurality of pixels,~~ respectively;

forming a first pixel electrode and a second pixel electrode overlying the passivation layer in the pixel areas respectively; ~~forming a plurality of pixel electrode layers overlying the passivation layer in the plurality of pixels, respectively;~~

providing a second substrate opposing to the first substrate; and

forming an opaque layer overlying the second substrate;

wherein one of the data bus line is disposed between the first pixel electrode and the second pixel electrode; and ~~wherein, in each pixel area, the pixel electrode layer is formed between a first data bus line and a second data bus line; and~~

wherein~~, in each pixel area,~~ a first space is kept between the ~~first~~ data bus line and ~~the periphery of~~ the first pixel electrode, and a second space is kept between the ~~second~~ data bus line and ~~the periphery of~~ the second pixel electrode; and

wherein a first light-shielding layer is formed adjacent to the first pixel electrode, and a second light-shielding layer is formed adjacent to the second pixel electrode ~~wherein, in each pixel area, a first light-shielding layer is formed between the first data bus line and the periphery of the pixel electrode layer, and a second light-shielding layer is formed between the second data bus line and the periphery of the pixel electrode layer; and~~

wherein the opaque layer overlaps the data bus line ~~the first data bus line, the second data bus line,~~ the first space and the second space; and

wherein a first overlapping width defined by ~~between~~ the opaque layer and the first light-shielding layer is different from a second overlapping width defined by ~~between~~ the opaque layer and the second light-shielding layer.

31. (currently amended): The fabrication method for a liquid crystal display device as claimed in claim 30, further comprising a step of:

forming an alignment film having ~~of~~ a rubbing direction overlying the first pixel electrode, the second pixel electrode, and the passivation layer;

wherein ~~when~~ an included angle between the rubbing direction and the data bus line is 40~50 degrees, the first space between the ~~first~~ data bus line and ~~the periphery of~~ the first pixel electrode is a liquid crystal reverse region, and the second space between the ~~second~~ data bus line and ~~the periphery of~~ the second pixel electrode is a liquid crystal non-reverse region; and

wherein the first overlapping width ~~adjacent to the liquid crystal reverse region~~ is larger than the second overlapping width ~~adjacent to the liquid crystal non-reverse region~~.

32. (currently amended): The fabrication method for a liquid crystal display device as claimed in claim 31, wherein the first overlapping width ~~the first space~~ is 6.5~7.5μm and the second overlapping width ~~the second space~~ is 4.5~5.5μm.

33. (original): The fabrication method for a liquid crystal display as claimed in claim 30, wherein the first space is equal to the second space.

34. (original): The fabrication method for a liquid crystal display as claimed in claim 30, wherein the first space is different from the second space.

35. (currently amended): The fabrication method for a liquid crystal display as claimed in claim 34, wherein the first space is larger than the second space. ~~further comprising a step of:~~

~~forming an alignment film of a rubbing direction overlying the pixel electrode layer and the passivation layer;~~

~~wherein, when an included angle between the rubbing direction and the data bus line is 40~50 degrees, the first space between the first data bus line and the periphery of the pixel electrode layer is a liquid crystal reverse region, and the second space between the second data bus line and the periphery of the pixel electrode is a liquid crystal non-reverse region; and~~

~~wherein, the first space adjacent to the liquid crystal reverse region is larger than the second space adjacent to the liquid crystal non-reverse region.~~

36. (currently amended): The fabrication method for a liquid crystal display as claimed in claim 35, wherein the first space ~~the first overlapping width~~ is 4~5μm and the second space ~~the second overlapping width~~ is 2~3μm.

37. (currently amended): The fabrication method for a liquid crystal display as claimed in claim 30, further comprising steps of:

forming a color filter layer overlying the second substrate;

forming a common electrode ~~layer~~ overlying the color filter layer and the opaque layer; and

forming an alignment layer overlying the common electrode ~~layer~~.

38. (original): The fabrication method for a liquid crystal display as claimed in claim 30, further comprising a step of forming a liquid crystal layer between the first substrate and the second substrate.